

CLAIMS:

1. A vaccine for use in combatting a parasitic infestation of helminths in a mammal comprising antigenic material, wherein said antigenic material comprises a *Fasciola hepatica* protease having Cathepsin L2 activity and being at least 95% pure, or an antigenic fragment or epitope thereof, together with an adjuvant.

2. The vaccine of claim 1, wherein the protease having Cathepsin L2 activity has a molecular weight of 29 kDa by sodium dodecyl sulphate polyacrylamide gel electrophoresis under reducing conditions.

3. The vaccine of claim 2, wherein the protease having Cathepsin L2 activity has an N-terminal amino acid sequence of A V P D K I D R R E S G.

4. The vaccine of claim 1, which further comprises a carrier.

5. The vaccine of claim 1, which further comprises one or more purified antigenic proteins.

6. The vaccine of claim 5, wherein said purified antigenic proteins are excretory/secretory proteins.

7. Cathepsin L2 having molecular weight of 29 kDa by sodium dodecyl sulphate polyacrylamide gel electrophoresis under reducing conditions.

8. A method of combatting a parasitic infestation of helminths in a mammal comprising administering to said

mammal a vaccine as claimed in claim 1 in an amount effective to combat said infestation.

9. The method of claim 8, wherein the protease having Cathepsin L2 activity has an N-terminal amino acid sequence of A V P D K I D R R E S G.

10. The method of claim 8, wherein said effective amount is within the range of 10-500 µg.

11. A protease having Cathepsin L2 activity or a proenzyme thereof or an antigenic fragment or epitope thereof produced by recombinant DNA techniques.

12. A DNA molecule encoding a protease, proenzyme, fragment or epitope as claimed in claim 11.